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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,093	02/26/2004	Hiroshi Toyama	11-248	4250

23400 7590 08/22/2005

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12040 SOUTH LAKES DRIVE  
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RESTON, VA 20191

EXAMINER

LEE, SEUNG H

ART UNIT PAPER NUMBER

2876

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/786,093

Applicant(s)

TOYAMA ET AL.

Examiner

Seung H. Lee

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/26/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Objections***

2. Claims 1-7 are objected to because of the following informalities:  
  
Re claims 1 and 5: The phrases "rod-like lens" are vague and indefinite, the Examiner will consider the rod-like lens as lens until clarified by the applicant.  
  
Re claim 3, line 2: Substitute "its" with --illumination lens--,  
  
Re claim 4, line 2: Substitute "its" with --multi-tiered lens unit--.
3. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Niwa (US 5,280,161).

Re claim 1: Niwa teaches a optical barcode reader comprising LEDs (5 and 6) for generating/projecting illumination light, and first lens (14) (i.e., multi-tiers lens unit having concave lens and convex lens) together with second lens (15) (i.e., lens) servers as illumination lens means, an optical reading means (12) such as a line sensor (12A) serving as a light-receiving optical system including a light-receiving sensor for receiving light reflected from the object (11), wherein the concave portion of lens and convex portion of lens are disposed alternatively as shown in figure 11(a) and the first lens can be integrated into the second lens forming one body such as shown in figure 8 (see figs. 1-12; col. 3, line 6- col. 5, line 32),

Re claim 2: The optical axis of the LEDs and the line sensor are disposed on the same plane accordingly,

Re claims 3-5: The lens (20) comprises a peripheral portion and central side portion for generating different optical characteristic such as the peripheral portion has a light diffusion smaller than that of the central side portion (not shown), the lens having the first lens (14) or the multi-tired lens unit wherein the first lens have various curvature radius as shown in figure 11(a) for producing different characteristics of illumination lights and second lens have curved surface as shown in figure 5(a) and 10(a) for producing different characteristics of illumination lights.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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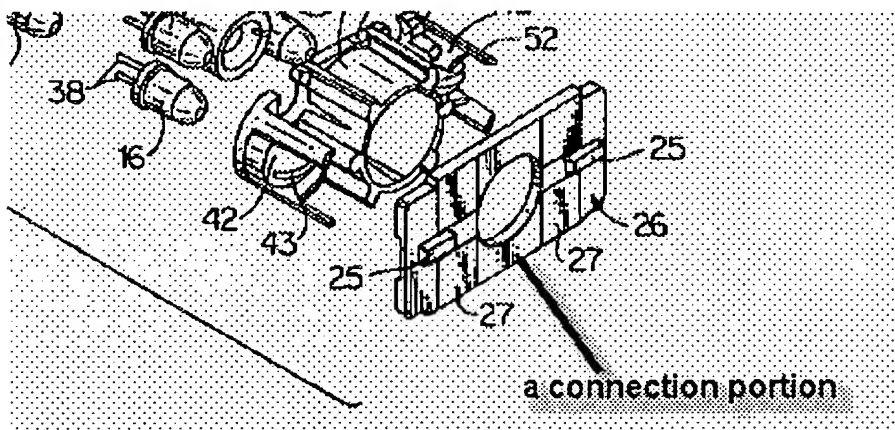
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niwa in view of McCall et al. (US 6,601,768)(hereinafter referred to as 'McCall') and Patel et al. (US 6,866,198).

The teachings of Niwa have been discussed above.

In addition to the teachings of Niwa as discussed above, he also shows that the lens are disposed symmetrically with respect to the optical reading means as shown in figure 9. However, he fails to particularly teach or fairly suggest that the illumination lens of reader comprises a guide light and the symmetrically disposed illumination optical system are integrally connected to each other.

McCall teaches the optical reader comprises a aiming LEDs (18) for generating aiming light and optical plate (26) for guiding aiming light to illuminate the target wherein the optical plate are integrally connected through a connection portion as shown below (see fig. 1a; col. 4, line 3- col. 5, line 40).



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It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of McCall the teachings of Niwa in order to provide an accurate reading of the target such as barcode by aiming the target precisely using the aiming light. Moreover, such modification would reduce the cost of assembly of the reader of the Niwa by employing the teachings of McCall by simplifying the assembly works of the each lens, that is, the lens assembly can be manufactured by installing single element as taught by McCall rather than installing two element as taught by Niwa.

Although, Niwa as modified by McCall teaches the optical code reader comprises the guide light source for generating guide light, they fails to particularly teach that the guide light source generate the laser light.

Patel teaches the barcode reader (1) comprises a laser diode as light source of the aiming module (480) for generating aiming pattern (see figs. 1 and 3; col. 9, lines 6-22).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Patel to the teachings of Niwa/McCall in order to provide unique aiming pattern that is readily distinguishable by the user.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


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Feng (US 5,949,057) and Schwartz et al. (US 6,164,544) disclose code reader having illumination means.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seung H. Lee whose telephone number is (571) 272-2401. The examiner can normally be reached on Monday-Friday, 7:30 AM- 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Seung H. Lee  
Art Unit 2876  
August 18, 2005